

### **Remarks**

After careful consideration of the outstanding Office Action, this application has been appropriately amended and favorable reconsideration on the merits thereof is respectfully requested.

For ease of consideration of this amendment, it is pointed out that original claims 20 through 24 have been retained in somewhat broadened form. Cancelled claims 1 through 19 (new claims 25 through 43) have been placed in dependent form depending directly or indirectly from independent claim 20. New claim 44 is in independent form and claims 45 through 51 depend directly or indirectly from independent claim 44. Therefore, upon the allowance of independent claims 20 and 44 for reasons to be advanced immediately hereinafter, the allowance of the remaining dependent claims of record will automatically follow.

In the last paragraph at page 3 of the outstanding Office Action, the Examiner rejected independent claim 20 "under 35 U.S.C . 103(a) as being unpatentable over Adams et al (US Patent 3913153) and Smith et al (US Patent 6544200)." At page 4, third paragraph, the Examiner states: "Adams et al describe an adjustable bed and motors for adjusting the position of the bed. Smith et al describe various detection systems for detecting the presence of humans inside the bed by detecting an ambient temperature change inside the bed. Smith et al shows in figure 1 and 4 the detection systems being enclosed [sic]". Based upon the latter descriptions of the prior art, the Examiner concluded "it would have been obvious to one person of ordinary skill in the art to connect a plurality of sensors to a bed, since said sensors would provide a caregiver with a monitoring system that detects changes in the state of a patient."

Before considering the Examiner's description of the prior art and the application of the prior art to the subject matter recited in independent claim 20, reference is made to the Supreme Court's decision in Graham v. John Deere Co. of Kansas City, 383 U.S. 1, 17-18, 148 USPQ 459, 467 (1966):

[8] While the ultimate question of patent validity is one of law, A. & P. Tea Co. v. Supermarket Corp., supra, at 155, 87 USPQ at 307, the § 103 condition, which is one of three conditions, each of which must be satisfied, lends itself to several basic factual inquiries. Under 103, the scope and content of the prior art are to be ascertained; and the level of ordinary skill in the pertinent art resolved. Against this background, the obviousness or nonobviousness of the subject matter is determined.

The first condition which "must" be satisfied is "the scope and content of the prior art are to be determined." As the Graham court pointed out and as was re-emphasized by the Court of Appeals, Federal Circuit, in Panduit Corp. v. Dennison Manufacturing Co. (1 USPQ2d 1593, 1597) "a prior patent must be considered in its entirety, *i.e.*, as a *whole*, including portions that would lead away from the invention in suit." The latter court also emphasized that "elements of separate prior patents cannot be combined when there is no suggestion of such combination anywhere in those patents," and moreover "a court (and Examiners) should avoid hindsight."

The Examiner is imminently correct in stating "Adams et al describe an adjustable bed and motors for adjusting the position of the bed." However, the Adams et al. patent "*as a whole*" is absolutely silent with respect to any type of safety system, particularly one constructed in accordance with the present invention "which is used to insure that the head and/or leg sections of the bed are not lowered from a raised position onto a person or animal." (See page 8, paragraph [0027].) Thus, the scope and content of the prior art Adams et al.

patent is actually silent with respect to safety but is certainly directed to a well known adjustable bed and motors for adjusting the positions thereof.

With respect to the patent to Smith et al., the Examiner is also imminently correct in stating: "Smith et al describe various detection systems for detecting the presence of humans **inside** the bed." (Emphasis, the undersigned's.)

First and foremost, the title of the Smith et al. patent is "Electronic **Patient Monitor** With Automatically Configured Alarm Parameters." As stated very briefly in the Abstract, the purpose of the Smith et al. disclosure is to provide "an electronic **patient monitor** that is suitable for use with a variety of different sensors." At column 5, the first paragraph thereof, Figure 1 is said to illustrate an electronic patient monitor which "is connected to a bed mat," whereas Figure 2 illustrates the electronic patient monitor "connected to a chair mat." In the paragraph bridging columns 5 and 6, the weight of the patient when placed atop a mat 100 "closes an electrical circuit" and when the patient "attempts to leave the bed, weight is removed from the sensing mat 100, thereby breaking the electrical circuit, which interruption is sensed by the attached electronic patient monitor 50. The patient monitor then signals the caregiver per its preprogrammed instructions. In some cases, the signal will amount to an audible alarm or siren that is emitted from the unit." It is clear that the **patient monitor** system is designed to protect against patient injury **should a patient inadvertently or otherwise leave the mat 100 of Figures 1 and 2.** Slight sophistication involving a monitor control logic 500 (column 8, beginning at line 30) permits a patient to depart and return to the bed or chair without setting off an alarm, but the system remains substantially the same, namely, **detecting a patient's movement after being placed in**

**or upon a bed or in a chair.** Apart from the latter, further detection might include a circuit "continuously responsive to any other patient condition, such as patient activity, wetness, incontinence, etc." (See column 9, lines 10 through 14.) Some of the latter might be accommodated by a sensor 400 which is "a wetness sensor" capable of detecting urine, blood, vomit or another fluid." (See column 10, line 23 through 32.) Additionally, an "environmental sensor 620 is a thermometer which would preferably measure the ambient/room temperature near the monitor 450. This information might be useful for many purposes, among which are early detection of room fires, etc." (See column 11, lines 22 through 26.) The environmental sensor 620 might also include a microphone "for measuring the ambient level of sound "which would allow a caregiver to listen "for trigger words such as 'help,' 'nurse' or, more generally, for any particularly word or for a loud/atypical sound such as, for example, sounds associated with breaking glass or an object falling." (See column 11, lines 31 through 43.) Quite clearly, the Smith et al. patent "as a whole" is somewhat more comprehensive than described by the Examiner, but there is no doubt that the disclosure is directed to a "patient monitor," totally absent any association with an adjustable bed, an enclosed chamber, or, most importantly, **"means for detecting the presence of a human or animal inside the enclosed bed frame,"** as originally recited in claim 20. The bed frame in Smith et al. is certainly not "enclosed" in any fashion. However, in order to resolve any issues of interpretation, the last limitation of claim 20 has been changed to read: "means for detecting the presence of a human or animal inside the enclosed bed frame **and beneath the adjustable mattress."**

The "differences" just noted between claim 20 and the prior art avoid any issue of obviousness, particularly as set forth by the Examiner at page 3, paragraph 6. There is absolutely no recognition of the invention now recited in independent claim 20. Accordingly, absent the citation and application of pertinent prior art, the formal allowance of independent claim 20 is considered proper and would be most appreciated.

The Examiner also apparently intended to elaborate upon the Smith et al. disclosure in Figures 1 and 4, as appears to be reflected at page 4, paragraph 3, last sentence of the outstanding Office Action. However, the latter sentence is incomplete (no period) and simply states that Figures 1 and 4 apparently show "the **detection** systems being enclosed." The undersigned would appreciate the Examiner elaborating upon precisely the manner in which the **detection** systems 100 are "enclosed," though claim 20 does not call for an enclosed detection system. Claim 20 recited an "**enclosed bed frame**" with the detection system being capable of detecting "the presence of a human or animal **inside** the **enclosed bed frame**." This issue is now considered moot because of the amendment to the last clause of independent claim 20. Stated otherwise, nowhere in either applied patent is there any suggestion or teaching capable of rendering obvious "means for detecting the presence of a human or animal inside the enclosed bed frame **and** beneath the adjustable mattress."

Reference is made to independent claim 44 newly added by this amendment which corresponds somewhat to claim 20 but additionally recites the first and second mattress positions to provide appropriate antecedent basis for subsequent dependent claims. However, the last limitation of independent claim 44 corresponds to the last limitation of independent claim 20. Accordingly, the formal allowance of claim 44 for the reasons heretofore


advanced with respect to claim 20 are incorporated herein by reference in order not to unduly lengthen this record. In view thereof, the formal allowance of claim 44 and each of the claims depending directly or indirectly therefrom is considered proper and would be most appreciated.

In view of the foregoing, the formal allowance of this application, including all of the claims presently of record, is herewith respectfully requested.

Respectfully submitted,

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